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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,787	04/21/2004	Anthony D'Agostino	1744	5077

23623 7590 06/20/2006

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CLEVELAND, OH 44114

EXAMINER

MILLER, BRANDON J

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/828,787		D'AGOSTINO ET AL.	
	Examiner		Art Unit	
	Brandon J. Miller		2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 2001/0044332 A1) in view of Nichols, III (US 2004/0133668 A1).

Regarding claim 1 Yamada teaches a power management system for a portable information device (see paragraphs [0002] & [0042]). Yamada teaches a configuration bank that stores power management schemes (see paragraphs [0050], [0051], & [0053]). Yamada teaches a power management component that utilizes at least one power management scheme to selectively control power to one or more portions of the wireless terminal (see paragraph [0049] & 0051]). Yamada teaches removing power from portions of the portable information device to reduce power consumption (see paragraph [0042] & [0049]). Yamada teaches maintaining power to a CPU (see paragraph [0048]). Yamada does not specifically teach a wireless mobile terminal and maintaining power to a network radio of the wireless mobile terminal to ensure reliable uninterrupted network communication. Yamada does teach a portable information device such as a notebook computer (see paragraph [0061]). Nichols, III teaches maintaining power to a network radio of the wireless mobile terminal to ensure reliable uninterrupted network communication (see paragraphs [0022], [0024] and FIG. 1). It would have been

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obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a wireless mobile terminal and maintaining power to a network radio of the wireless mobile terminal to ensure reliable uninterrupted network communication because a portable computer can be wireless and this would allow for an improved power saving switching mode for reducing power consumption of a mobile device.

Regarding claim 3 Yamada teaches the power management component is activated to remove power via one of: a time lapse; a period of inactivity; an interrupt; an event; a user request; a programmatic application program interface (API); network data; an application, the wireless mobile terminal, and another wireless mobile terminal (see paragraph [0048]).

Regarding claim 4 Yamada teaches the power management component is activated to resume power via one of: pressing a button; turning a key; touching an active touch screen area; a programmatic control; voice; expiration of a timeout; a date; an electrical current; a request; a signal; motion; a trigger; a link status change; a network keep alive; a proxy-ARP packet; a re-authentication packet; a directed packet; wake-on-LAN request; and reception of network data (see paragraphs [0053]).

Regarding claim 5 Yamada teaches the power management component executes as a background application (see paragraphs [0021] & [0023]).

Regarding claim 6 Yamada teaches the power management component automatically executes the power management scheme to reduce power consumption or waits for user confirmation (see paragraphs [0023] & [0024]).

Regarding claim 7 Yamada teaches the power management component executes in one of wireless mobile terminal BIOS, an application, an external device, and a wireless mobile terminal operating system (see paragraphs [0002] & [0057]).

Regarding claim 8 Yamada teaches the power management component utilizes one of intermittent and continuous polling of the wireless mobile terminal to automatically determine when power should be reduced and dynamically applies the power management scheme to reduce power (see paragraph [0048]).

Regarding claim 9 Yamada teaches the power management scheme is based on at least one of a wireless mobile terminal characteristic, a state of one or more portions of the wireless mobile terminal, a user identified configuration, and a user attribute (see paragraph [0048]).

Regarding claim 10 Yamada teaches extending the battery life by reducing the power applied to a portable terminal (see paragraph [0061]).

Regarding claim 11 Yamada teaches the power management scheme is one of a default, a user defined, an application generated and an intelligence created configuration (see paragraphs [0023] & [0048]).

Regarding claim 12 Yamada teaches the intelligence created configuration is generated based on at least one of machine learning, a statistic, a probability, an inferences and/or a classifier (see paragraphs [0024] & 0048]).

Regarding claim 13 Yamada teaches an API that is utilized for at least one of invoking the power management component and providing a power management scheme (see paragraph [0048]).

Regarding claim 14 Yamada teaches a method that manages power for a portable terminal (see paragraphs [0002] & [0042]). Yamada teaches receiving indicia indicating power should be removed from a portion of the portable terminal (see paragraph [0049]). Yamada teaches removing power from the portion of the portable terminal to reduce battery power consumption (see paragraph [0049] & [0061]). Yamada does not specifically teach maintaining reliable uninterrupted portable terminal network connectivity. Nichols, III teaches maintaining reliable uninterrupted portable terminal network connectivity (see paragraphs [0018] & [0024]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include maintaining reliable uninterrupted portable terminal network connectivity because this would allow for an improved power saving switching mode for reducing power consumption of a mobile device.

Regarding claim 15 Yamada teaches obtaining a power management configuration that defines a power removal scheme (see paragraph [0049]).

Regarding claim 16 Nichols, III teaches sustaining power to a CPU and a network radio of the portable terminal to ensure reliable network communications (see paragraphs [0018] & [0022]).

Regarding claim 17 Fan teaches the power management component is activated to remove power via one of: a time lapse; a period of inactivity; an interrupt; an event; a user request; a programmatic application program interface (API); network data; an application, the wireless mobile terminal, and another wireless mobile terminal; pressing a button; turning a key; touching an active touch screen area; a programmatic control; voice; expiration of a timeout; a date; an electrical current; a request; a signal; motion; a trigger; a link status change; a network

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keep alive; a proxy-ARP packet; a re-authentication packet; a directed packet; wake-on-LAN request; and reception of network data (see paragraph [0048]).

Regarding claim 18 Yamada teaches a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 19 Yamada teaches a power management method that facilitate distribution of power to portions of a portable computing device (see paragraphs [0002] & [0042]). Yamada teaches detecting that power should be removed from at least a portion of the wireless computing device (see paragraphs [0042] & [0049]). Yamada teaches retrieving an associated power management scheme; and employing the power management scheme to remove power from the portion of the wireless computing device while sustaining power to the wireless computing device's CPU (see paragraphs [0042], [0048] & [0049]). Yamada does not specifically teach a wireless computing device and providing reliable uninterrupted portable terminal network connectivity. Nichols, III teaches a wireless computing device and providing reliable uninterrupted portable terminal network connectivity (see paragraphs [0022], [0024] and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a wireless computing device and providing reliable uninterrupted portable terminal network connectivity because a portable computer can be wireless and this would allow for an improved power saving switching mode for reducing power consumption of a mobile device.

Regarding claim 20 Yamada teaches a device as recited in claim 8 and is rejected given the same reasoning as above.

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Regarding claim 21 Yamada teaches dynamically adjusting the power applied to the at least one portion of the wireless computing device (see paragraphs [0042] & [0049]).

Regarding claim 23 Yamada teaches a device as recited in claim 11 and is rejected given the same reasoning as above.

Regarding claim 24 Yamada teaches employing intelligence to facilitate managing the power applied to the at least one portion of the wireless computing device (see paragraph [0024] & [0025]).

Regarding claim 25 Yamada teaches a device as recited in claim 12 and is rejected given the same reasoning as above.

Regarding claim 22 Yamada teaches drawing less power from a battery utilized to power a portable terminal (see paragraph [0061]).

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 2001/0044332 A1) in view of Schneider (US 2005/0015618 A1).

Regarding claim 26 Yamada teaches a system that facilitates portable information device power management (see paragraphs [0002] & [0042]). Yamada teaches means for determining when to activate power management; and means for acquiring a selective power management configuration (see paragraphs [0041] & [0042]). Yamada teaches means for applying the power management configuration to selectively lower power applied to portions of the terminal to mitigate power consumption while maintaining desired functionality (see paragraphs [0042] & [0049]). Yamada does not specifically teach a wireless mobile barcode scanner. Schneider teaches a wireless mobile barcode scanner (see paragraph [0009]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to

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include a wireless mobile barcode scanner a because a barcode scanner can be a portable information device and it would allow for improved power saving switching mode.

Response to Arguments

Applicant's arguments with respect to claims 1, and 3-26 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment (“reliable uninterrupted network communication”) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tourrilhes et al. Pub. No.: US 2003/0050103 A1 discloses a power management scheme for a communication interface of a wireless device.

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Peng et al. Pub. No.: US 2004/0082362 A1 discloses a method for power management of a smart phone.

Lencevicius et al. Pub. No.: US 2004/0204183 A1 discloses a power management profile on a mobile device.

Carballo et al. Pub. No.: US 2004/0203477 A1 discloses an interface transceiver power management method and apparatus including controlled circuit complexity a power supply voltage.

Vensuna Pub. No.: US 2006/0116179 A1 discloses a system and method for optimizing power consumption in a wireless device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to be "B. Eng".

June 12, 2006

A handwritten signature in black ink, appearing to be "George Eng".

GEORGE ENG
SUPERVISORY PATENT EXAMINER